

XVIII. *Remarks on Centaurea solstitialis and C. melitensis.* By James
Edward Smith, M. D. F. R. S. P. L. S.

Read October 2, 1792.

THE plant intended by Mr. Hudson in his *Flora Anglica*, edition 2, p. 377, by the name of *Centaurea solstitialis*, has never been well ascertained. It is said in Ray's Synopsis to have been found, by Mr. Bobart, about hedges in the neighbourhood of Cirencester in Gloucestershire; and Mr. Hudson adds Northfleet in Kent as another place of its growth, probably from his own knowledge, as he quotes no authority.

What is commonly preserved in our English gardens and herbariums under the name of *Centaurea solstitialis*, and taken for the plant of Ray and Hudson, I discovered, on receiving the Linnean herbarium, to be the *C. melitensis* of our great master. I always, from that time, sought every opportunity of determining which of the two species ought really to be considered as belonging to our English Flora, but long without success, having never been able to see any undoubtedly wild specimens.

When in Languedoc, in the winter of 1786, I there gathered the Linnean *C. solstitialis*, and brought its seeds to the garden of

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my worthy friend, Dr. Gwyn, at Ipswich, where several of the plants came up and flowered. This species was never, to the best of my knowledge, seen in an English garden before, at least not in modern times.

On visiting Mr. Crowe, F. L. S. at Lakenham, this summer, he to my great surprize shewed me a recent wild specimen of the real *C. solstitialis*, gathered by himself in a grassy field at Arminghall, about two miles from Norwich, in a gravelly soil, where he assured me he had observed it for several years undoubtedly wild. Mr. Crowe himself did not consider this as a very important discovery, not recollecting that there was any difference between the plant he had gathered at Arminghall, and that we used to have in our gardens about Norwich ten or twelve years ago, the two species being indeed much alike at first sight. If indeed they had been the same, it might have been supposed that seeds had escaped from a garden, and planted themselves, or been intentionally sown, in the field above mentioned. But as the true *C. solstitialis* has never been in any garden, in this neighbourhood at least, except Dr. Gwyn's forty miles distant, and that not till the year 1788, I have no doubt that this species is really wild at Arminghall. Whether it may have been in former times introduced among corn from abroad, I cannot tell; it now grows among short grass, with all the appearance of a wild plant; nor are the farmers here in the habit of importing seed from abroad.

It remains therefore to be examined whether *C. melitenfis* be likewise a native of our island or not. Perhaps the old herbariums in the British Museum may throw some light on this subject*, or the places of growth mentioned by Ray and Hudson may still afford the plant they intended.

* I have since examined them without obtaining any positive satisfaction.

The two species are easily distinguished by the following marks :

C. solstitialis has the lobes of the leaves acute, and especially the terminal one, which is perfectly deltoid. The scales of the calyx are each terminated by a very strong pale yellow spine, half an inch in length, accompanied by several smaller ones.

C. melitensis on the contrary has all the lobes of its leaves rounded, and the terminal one remarkably so, and perfectly blunt, even retuse. The calyx is fringed with small brownish spines, of which the longest is not above one-third the length of *C. solstitialis*.—Both species have bright yellow flowers.

The figure in Gerarde's Herbal, the second edition, p. 1166, is added by Johnson, and represents the true *C. solstitialis* very well.

Norwich, Sept. 28.

1792.